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24-Hour, 7-Day Accessibility to Care: MEDALLION and Medallion II Programs

Introduction

The Commonwealth of Virginia Department of Medical Assistance Services (DMAS) is charged with the responsibility of evaluating the quality of care provided to Medical Assistance recipients enrolled in the MEDALLION Primary Care Case Management program and the Medallion II Managed Care Organization (MCO) program. To ensure that the care of enrollees meets acceptable standards for access, timeliness, and quality, DMAS contracts with the Delmarva Foundation for Medical Care, Inc. (Delmarva) to serve as the External Quality Review Organization (EQRO).

This report summarizes the results of the second survey of 24-7 access to care for participants in the MEDALLION and Medallion II plans. The ability to reach one's provider outside of normal office hours is critical to both patients' quality of care and to efforts to manage costs incurred for Medicaid recipients' medical care. Twenty-four-hour, seven-day phone access can provide information and direction that directly impacts the health of MEDALLION and Medallion II participants. Obtaining emergency prescriptions, information about controlling chronic conditions, and other such assistance is as important to plan participants outside of normal office hours as it is during the normal workweek. Controlling cost is a second reason for the importance of 24-7 access. If program participants cannot obtain information, guidance regarding the need to go to the emergency room, or other assistance, they are more likely to incur expensive emergency room charges or require more extensive care for medical conditions that worsened because prompt assistance was unavailable from their physician.

Determining whether 24-7 phone access to physicians exists and whether it is improving, and identifying approaches that can result in improved 24-7 phone access is the focus of this report. The sections that follow provide an overview of the purpose and objectives of this report, describe the methodology employed to collect and analyze the data, summarize key study findings, and present a series of conclusions and recommendations for DMAS to consider.

Purpose and Objectives

The 24-hour, 7-Day Accessibility to Care Study has been conducted to ensure that high-quality accessible care, which is consistent with generally accepted standards, is provided to the Medicaid enrollees. Physicians in the MEDALLION program as well as all MCOs providing care to members of Medallion II plans in the Commonwealth of Virginia are required to provide access to medical service information 24 hours per day, 7

days per week. Although a personal contact is not required for each inquiry, the regulations and contract language specify that certain services be provided. Specific requirements are detailed in the MEDALLION and Medallion II Contracts, which are very similar in this regard. The Medallion II contract reads:

> *The Contractor shall maintain adequate provider network coverage to serve the entire eligible Medallion II populations in geographically accessible locations within the region twenty-four (24) hours per day seven (7) days per week.*
>
> *In accordance with the Code of Virginia 38.2 – 4312.3 as amended, the Contractor shall maintain after-hours telephone service, staffed by appropriate medical personnel, which includes access to a physician on call, a primary care physician or a member of a physician group for the purpose of rendering medical advice, determining the need for emergency and other after hours services, authorizing care, and verifying enrollee enrollment with the Contractor.*

This study was designed to evaluate the access to care afforded MEDALLION and Medallion II enrollees in relation to the programmatic requirements described above. Accessibility was assessed on the weekends as well as between 7 p.m. and 7 a.m. during the week—periods of time when doctors' offices are normally closed. The calls were designed to ascertain what a typical participant in each plan would experience when attempting to reach a MEDALLION or Medallion II provider outside of normal office hours.

Beyond achieving the general goal of determining whether these 24-7 access requirements have been met, this study also had several more specific objectives, including:

- Determining whether providers in both programs had valid phone numbers that plan participants could reach.
- Confirming that persons could call these numbers and obtain required emergency assistance.
- Describing differences in the ability to obtain this information based on medical specialty, program or MCO affiliation, and other such factors.
- Comparing access trends in this year's study to findings obtained one year ago.
- Obtaining additional information on the resources available when the telephone call reached an answering machine.

Delmarva's approach to accomplishing these objectives is described in the following section.

Study Methodology

Overview

This study uses an approach quite similar to the methodology in the 24-7 Access Study completed in calendar year 2002. However, this year's report evaluates 24-7 access for MEDALLION providers as well as for providers affiliated with each of the five participating Medallion II MCOs. This year's study also focuses exclusively on access during weekends and on weekdays between the hours between 7 pm and 7 am. Because only 80 calls were made to providers affiliated with MEDALLION and with each of the five Medallion II MCOs, it was necessary to exclude normal working hours so that there was a large enough sample of each combination of plan and time period from which to draw meaningful conclusions.

Sampling Plan

A telephone survey methodology was used to evaluate the availability and quality of medical service information available from providers. Research interviewers contacted a representative selection of 480 providers affiliated with MEDALLION or Medallion II. From a list of all unique phone numbers for providers affiliated with MEDALLION and with each of the five Medallion II MCOs, 80 phone numbers were randomly selected for each plan. Provider names and telephone numbers were drawn from the most recently updated provider information file that was provided by DMAS. This sample size permitted estimates of rates that were within ± 5% of the true rate for all providers affiliated with the Medallion II program overall and ± 11% for providers in the MEDALLION program and for each Medallion II MCO.

For MEDALLION and each Medallion II MCO, the 80 telephone numbers were randomly assigned to one of the five general calling periods summarized in Table 1.

Table 1.

CALL ASSIGNMENT by TIME PERIOD					
Time of Week	Early AM		Daytime	Late PM	
	1-2 am	6-7 am	2-5 pm	7-8 pm	11-12 am
Weekday	8	8	0	8	8
Weekend	8	8	16	8	8
80 Total Calls per Plan					

Calls were made on weekends in early morning (1-2 am or 6-7 am), daytime (2-5 pm) and late evening (6-7 pm or 11-12 am) hours. Calls during the week were made in the same early morning and late evening hours, but no calls were made during the weekday between 7 am and 7 pm because the focus of this study was on access outside of normal office hours. Weekend calls within each time period were evenly split across Saturday and Sunday while weekday calls were evenly distributed across the five weekdays. All calls were made in a one-week period beginning at 1 am, Sunday, Oct. 5, 2003.

Because the same number of calls was made for each plan in each time period, analyses can be performed to simultaneously ascertain how the specific plan, time of day and the time of week influence the accessibility of access to emergency information outside of normal office hours.

Survey Protocol

A fully structured interview script was developed to obtain information required to accomplish study goals. Because the focus was on emergency access, if the phone number reached a person, the interviewer simply determined whether that person was the physician, a member of their office staff, or an answering service contracted by the physician. In all such cases, emergency access was available to plan participants. If the phone call reached an answering machine, the interviewer coded the taped message to confirm that it provided information about emergency contacts, normal office hours, and other relevant information. The entire set of questions is reported in Appendix A.

Interviewer Training

Research staff interviewers who had completed a training program on telephone survey techniques made the calls. Training included information about the objectives of the survey, the importance of accurate recording of data, the benefits of "active listening," and instructions on overcoming potential objections of participants. A portion of the training session was devoted to a description of various scenarios that might occur during the survey and appropriate coding of responses. All interviewers demonstrated an understanding of the tool prior to initiation of the survey calls.

The instructor was a Ph.D.-level research methodologist with extensive experience in survey research and health care evaluation. The instructor had previously performed a pretest of the survey instrument and had modified the data collection tool to minimize ambiguity of the questions. The methodologist supervised the interview process throughout the study.

The survey was designed to be concise, reliable, and valid. Pretesting indicated that all necessary information could be collected in less than 2 minutes. Minimizing the response burden of participants has been found to improve the rates of response in telephone surveys (Dillman, 1978). The interviewers were instructed to introduce themselves by name and indicate their professional affiliation with the Delmarva Foundation. The survey was described as a quality improvement study required by the DMAS of the Commonwealth of Virginia. Confidentiality of the information provided was emphasized, and respondents were thanked for their participation. Content validity of the survey was established by comparing the particular questions asked to the contractual obligations of the providers.

Data Entry and Validation

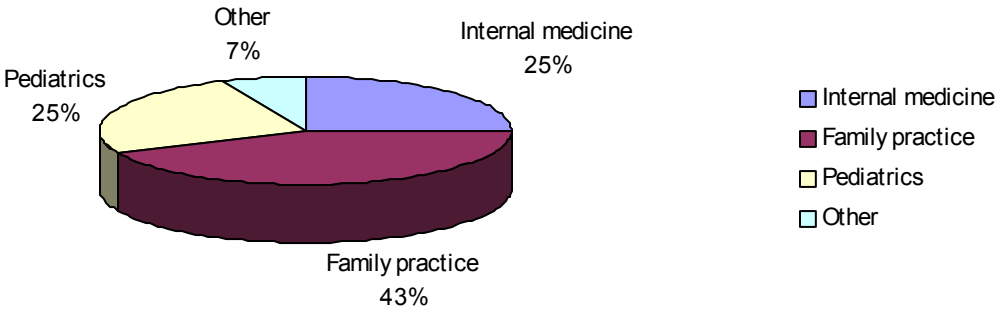
For maximum efficiency, and to reduce inaccuracies associated with transferring responses from print to electronic form, data were recorded in an EXCEL database, which was read directly into the statistical software (SAS) used to perform analyses. Data were screened for duplicate entries, missing values, and out-of-bounds values. Across the 480 surveys no out-of-bounds values and no inappropriate missing data were observed.

For information from a survey to be optimally useful, the data must be representative of the population under study. In part, the representative selection of providers to be included in the sample as well as the random assignment of call times helped to assure that the sample was unbiased. However, we performed several checks prior to completing the survey to assure that the sample drawn was representative. The two most important checks were:

- We examined the data we received to ensure that a very high percentage of providers from MEDALLION and each Medallion II MCO had a phone number. This examination showed that one MCO (Anthem) had no valid phone numbers in the provided database. To address this issue, we drew that MCO's sample and then DMAS obtained phone numbers for selected providers from the Anthem member services website. Following this change, we established that each MCO had phone numbers for over 97% of their providers.

- We examined the specialty codes for providers in our sample with those for the entire list of participating providers. Figure 1 shows the percentage of sampled Medallion II providers who fell into the three largest specialties. Providers in the "other" category included those with a specialty in "general practice," obstetrics/gynecology, and geriatric medicine. Results for MEDALLION providers were comparable. In neither case was there a statistically significant difference between the percentage in each specialty in the sample and the percentage in each specialty in the entire provider list.

Figure 1. Percentage of Medallion II Plan Providers by Specialty



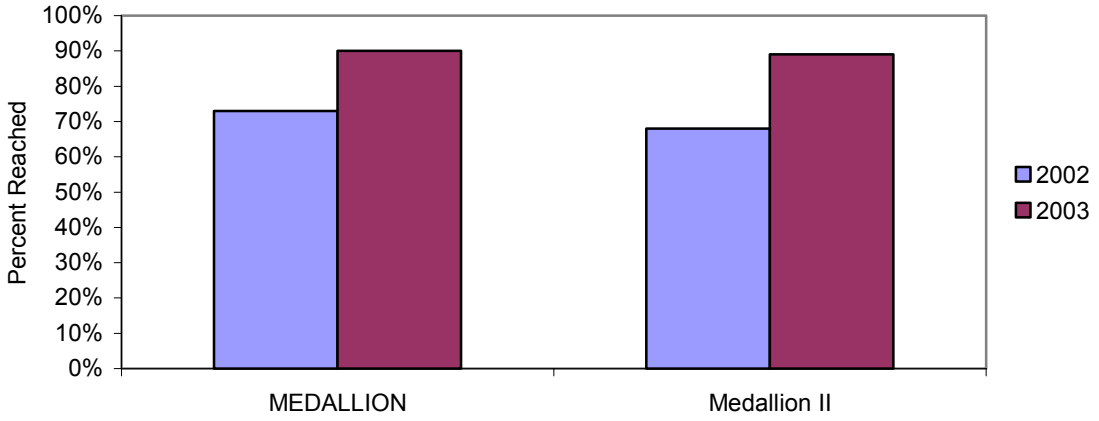
After these checks were performed and the data were collected and screened a final time, we proceeded to address the questions driving the study.

Results

Emergency Contact

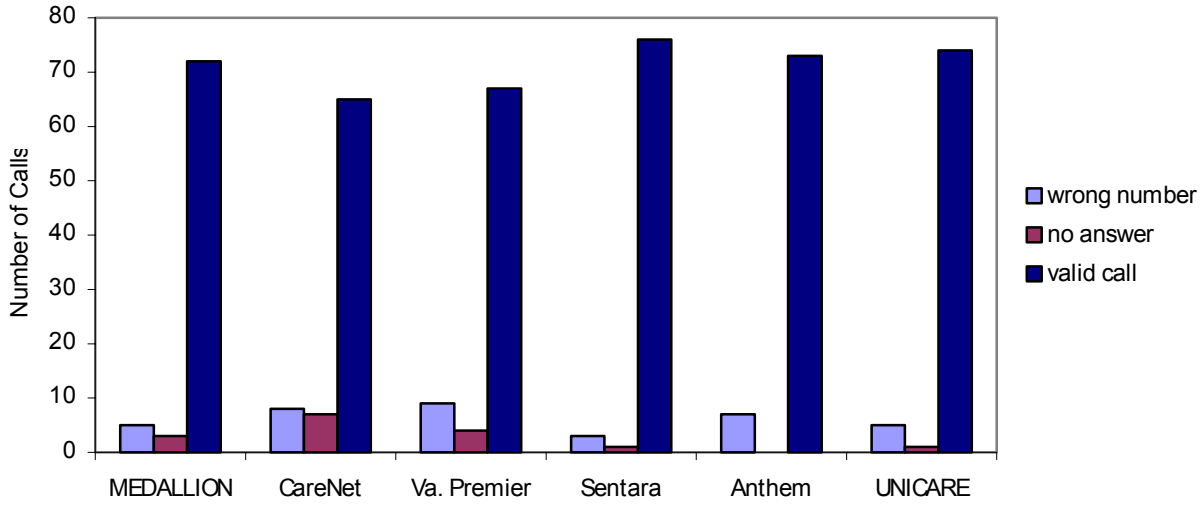
A first purpose of the study was to determine whether participants in the MEDALLION and Medallion II programs could obtain emergency assistance from their physicians. Such assistance presumes that the provider has a valid phone number that is answered in a reasonable period of time (i.e. six rings or less). The phone number for each sampled provider was dialed and an initial determination was made concerning whether the number was valid. Figure 2 compares the initial disposition of calls made during the 2002 and 2003 surveys.

Figure 2. Providers with Valid, Answered Phone Numbers



Providers sampled from both MEDALLION and Medallion II were reached more frequently in the 2003 Survey than they were in 2002. Ninety percent of providers in the MEDALLION sample and 89% of those in the Medallion II sample had valid phone numbers that were answered within six rings While MCO-specific information was not available in 2002, Figure 3 shows the percentage of valid calls for MEDALLION and each MCO participating in the Medallion II program, along with the reasons calls were invalid. Overall, in the 2003 sample, 8% of calls did not reach the physician's number and 3% were not answered within six rings.

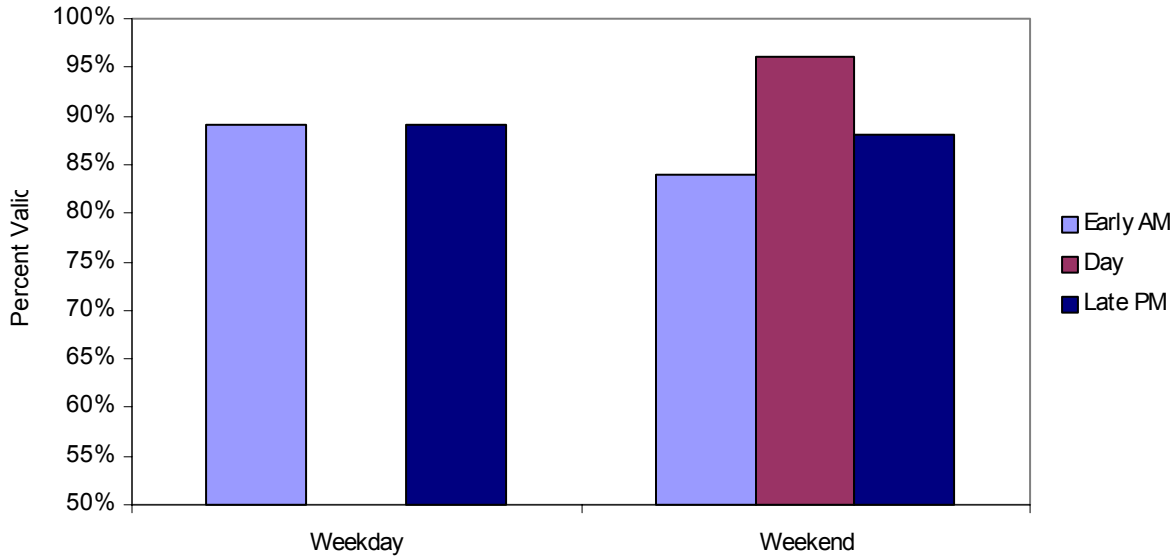
Figure 3. Number of Valid Calls for Each Plan's 2003 Sample



The CY 2002 report identified the need to improve the accuracy of numbers available in the provider database. Results from this year's study reflect substantial improvement in this area. Only 10% of calls did not reach the desired provider, compared to 30% a year ago. While this trend is very encouraging, further improvement can still occur so that participants in these plans can obtain access to emergency assistance from their physicians. Because participants who cannot reach their providers may be more likely to seek care in emergency rooms, continued reductions in inaccurate phone information may be very cost effective for the Commonwealth's Medicaid program.

As a follow-up to this analysis we compared the ability to reach providers across the time periods during which calls were placed. Figure 4 shows the results of this comparison. While 95% of calls made on weekends during the day were valid, the difference in the percentage of calls in other time periods was not statistically significant. As a result, it does not appear that there is a particular time period that can be focused on to improve after-hours access to providers.

Figure 4. Percentage of Valid Calls by Time Period

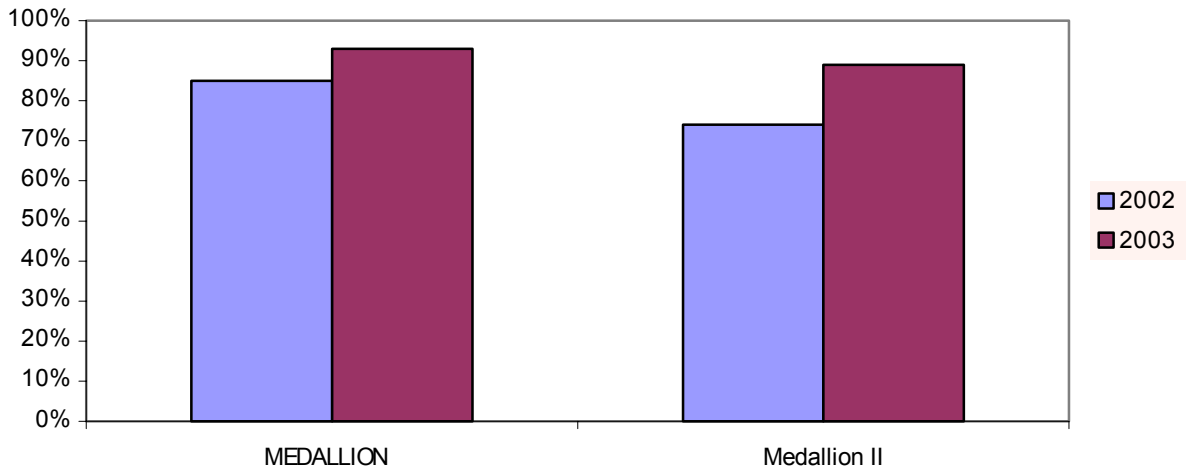


We also compared the percentage of valid numbers reached in each of the three largest specialty groups. While 94% of pediatricians had valid numbers, compared to 89% of those in family practice and 86% of those in internal medicine, there is insufficient evidence to conclude that some specialties have a significantly higher percentage of invalid phone numbers than others do.

Even if a phone number for the physician is valid and answered, emergency contact information may still be unavailable. Sometimes these numbers reached answering machines while in other cases a member of the physician's office staff or an answering service answered the phone. While answering services and the

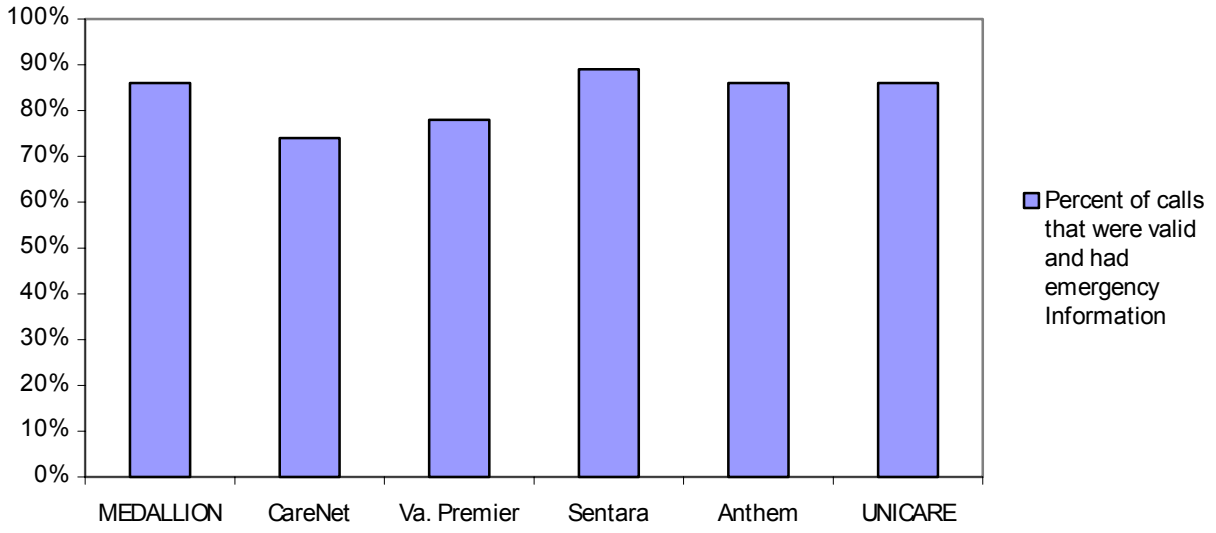
physician's office staff represent an emergency contact, we examined the answering machine messages to determine whether they provided needed information regarding whom to call or how to access services in an emergency. Ninety percent of all answering machines provided this information. Differences between MEDALLION (93%) and all MCOs within Medallion II were less than 6% and probably reflect random sampling error. When we compared these percentages to the results from last year's survey, improvement was observed for both the MEDALLION and Medallion II programs. As shown in Figure 5, the percentage of answering machines with emergency contact information increased by 8% for MEDALLION providers and 15% for providers in Medallion II.

Figure 5. Percent of Answering Machines with Emergency Contact Information



One final analysis was performed to determine the overall percentage of provider phone numbers that provided emergency contact information. We calculated this percentage by dividing the number of valid calls that reached either an answering machine that provided emergency contact information or a representative from the physician's office or answering service by the total number of calls. Results are reported in Figure 6, and reflect very little difference across MEDALLION and Medallion II plans.

Figure 6. Percent of calls that were valid and had emergency Information

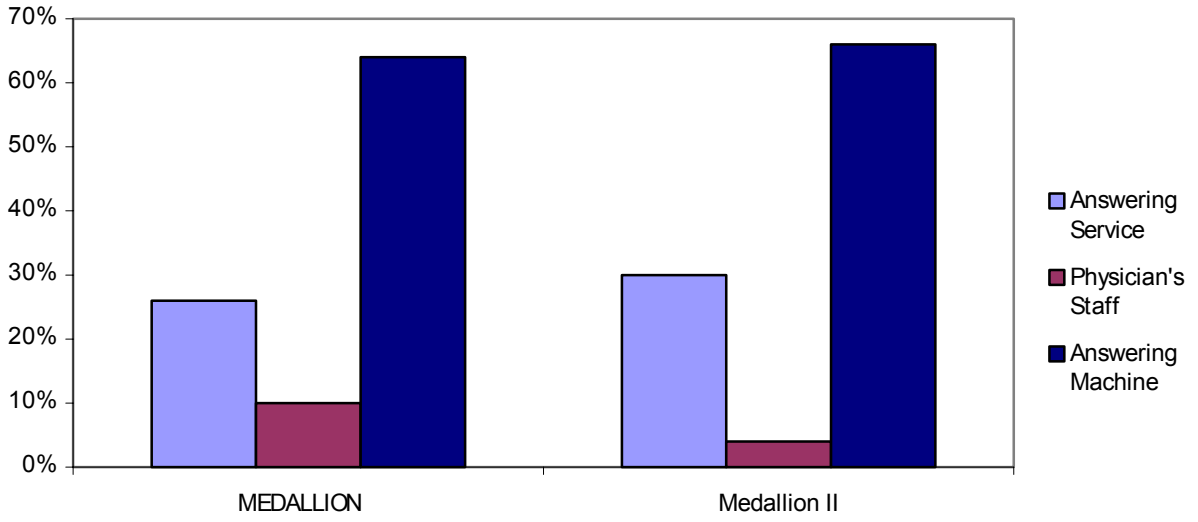


Overall, these numbers reflect little difference in the availability of emergency contact information to participants in MEDALLION or any of the Medallion II MCOs. Because many providers participate in several Medallion II MCOs and some affiliate with MEDALLION and one or more MCOs, similarities in plans' rates are almost inevitable. The list of providers for each plan that were not valid or lacked emergency contact information is provided in Appendix A.

Type of Contact

A second purpose of the study was to describe who was reached when a valid phone call was completed. Figure 7 reports the percentages of calls to MEDALLION and Medallion II providers that reached an answering machine, a member of the physician's office staff, or an answering service.

Figure 7. Percent of Valid Calls by Response Type

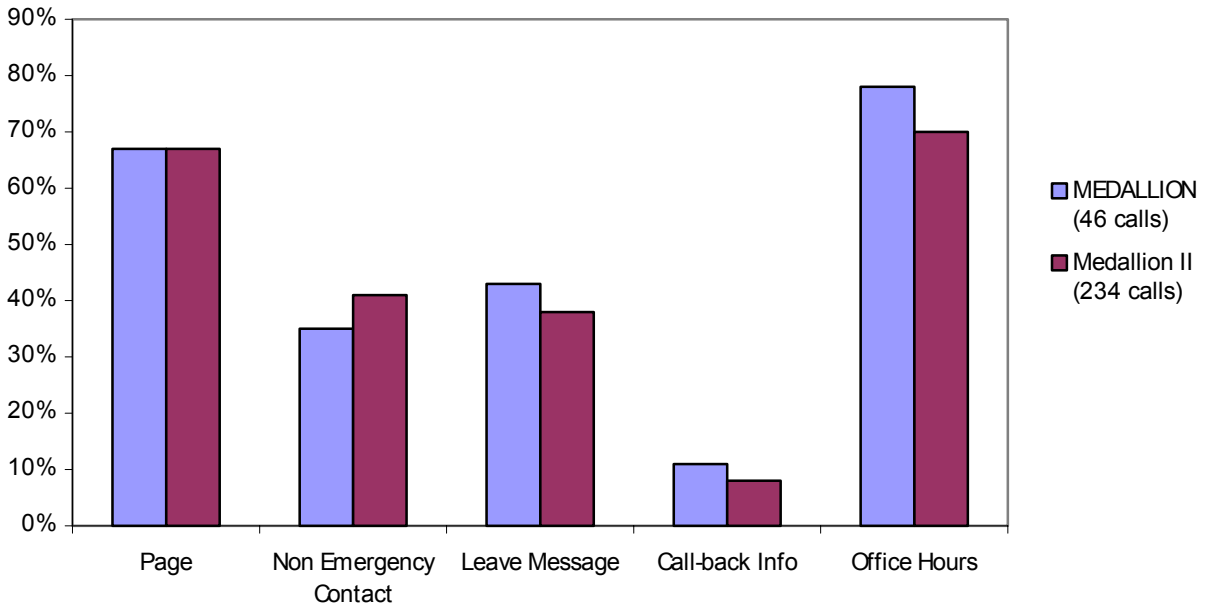


Roughly two-thirds of all calls in both MEDALLION and Medallion II reached an answering machine while less than 10% of calls to either program reached physicians' office staff. These percentages differ considerably from those reported in last year's study, when substantially more calls reached office staff. However, these differences are because last year's study made calls on weekdays during office hours, while this year's study did not.

Answering Machine Information

A third goal of this year's study was to describe the types of information provided on physician's answering machines. Because two-thirds of all calls on weekends and between 7pm and 7am reach an answering machine, understanding the content of these messages is important to efforts to evaluate resources made available to plan or program participants. Figure 8 compares MEDALLION and Medallion II providers with respect to whether answering machine messages included the ability to page the physician, non-emergency contact information, the ability to leave a message, information on when a callback could be expected, and the physician's office hours. No statistically significant differences between the two provider groups or between specific Medallion II MCOs were observed. Over 70% of providers in both programs provided information on normal office hours and 67% in each program provided paging information. In contrast, callback information was provided by less than 12% of providers in either program.

Figure 8. Percent of Answering Machines with Specific Features



Discussion

During this study we compiled extensive information on the 24-hour, 7-day access by phone to health care for the MEDALLION and Medallion II programs. Of 480 calls placed by research interviewers 90% received a valid response and 80% enabled a plan participant to obtain information on what to do in an emergency situation. No statistically significant differences were observed in the ability to obtain after-hours assistance based on the time of day (early am vs. late pm), time of week (weekend vs. weekday), physician specialty (family practice, pediatrics, internal medicine), program affiliation (MEDALLION vs. Medallion II), or plan affiliation (specific Medallion II MCOs compared to each other). Emergency access increased substantially from 2002, when only 70% of phone calls reached a valid contact. Of the valid phone responses, a live person answered one-third, with personnel from an answering service taking a majority of those calls for both the MEDALLION and Medallion II samples. Electronic answering devices answered the remaining two-thirds. These findings indicate that 24-7 phone access coverage is reasonable and has improved from one year ago. However, improvement in this area still can benefit Medicaid recipients in the Commonwealth of Virginia.

This study's sampling approach provides strong grounds for drawing conclusions about phone access to care on weekends and between 7 pm and 7 am on weekdays—periods of time when physician office visits are generally not available and when the only available medical care may be through a hospital emergency room. By randomly assigning each plan's phone calls to one of thirty time blocks, with two early morning and two late evening time blocks on each of the five work days and the weekends and two afternoon time blocks on

the weekends, the design allowed for strong conclusions to be drawn concerning whether time period affected phone access to providers. And by drawing samples of 80 telephone numbers from MEDALLION and each Medallion II MCO, there was moderate power to detect differences between those programs with respect to access to after-hours care.

Because this survey included a large random sample, the conclusions drawn from this study can be generalized to apply to the population of providers in the MEDALLION and Medallion II programs. In many cases, multiple providers share the same phone number, which means that generalizations based on 480 phone numbers can directly assess phone access to a substantially larger number of providers. Moreover, because many of the sampled providers are affiliated with several of the specific Medallion II health plans and, in some cases, also with the MEDALLION program, results reported for particular plans or programs also provide information on care received by participants in the other plans or programs.

Beyond the conclusions that can be drawn from this year's study, results become more useful to DMAS because they build on last year's study, which was quite comparable to this year's. By comparing major conclusions from last year's and this year's studies, it is possible to examine trends impacting the quality of care available to participants in the MEDALLION and Medallion II programs. Whitmore (1997) and others have noted that policy makers benefit from longitudinal monitoring that allows them to detect trends and examine changes that result as health plans expand and mature. Such monitoring is essential for quality improvement efforts.

Although this study provides a strong overview of 24-hour, 7-day phone access to providers, it does have several limitations that should be noted. First, in consultation with DMAS, a decision was made to limit phone calls to periods outside those when physician offices are normally open. While this design choice allows for stronger generalizations about phone access to providers in these periods of time, it does not provide information about how easy it is to reach providers during normal business hours. Last year's study found that it was more difficult to reach providers during normal business hours than it was to reach their answering machines or answering services in times the office was closed. Because of this design difference, some comparisons between this year's and last year's studies should be made cautiously, because some may be explained by the fact that more phone calls last year were made during working hours when calls were more likely to be answered by office staff, the phone number was busy, or the caller was placed on hold.

A second limitation to the study design is that it did not consider some variables that also may impact access to care. This limitation was noted in last year's report and additional analyses were performed this year to take into account some additional factors. Specifically, this year's study obtained information on the specific Medallion II health plans that providers affiliate with and used this information to draw a more representative sample from each MCO. Data on provider's specialty code is also substantially more complete this year. As

a result, this year's report could draw stronger and more accurate conclusions about how specialty may impact phone access to care.

Including additional variables in analyses is a desirable goal, but one that is impacted by the study's third major limitation. Although a sample of 80 telephone numbers from the MEDALLION program and an additional 400 drawn evenly from the five Medallion II plans is substantial, statistical tests that are based on subgroups have very limited statistical power. As a result, although adding variables such as region, practice size, or the number of plans providers affiliate with is desirable, when these explanatory variables are combined with others already included in the design, results are based on sample sizes that make conclusions extremely tentative.

Perhaps the most significant finding in this year's study is the substantial improvement in rates of reaching valid provider phone numbers with appropriate emergency contact information. The number of valid phone numbers for both MEDALLION and Medallion II providers increased from about 70% a year ago to 90% this year. Part of this improvement may reflect higher quality information in the databases from which our sample was drawn. While improved accuracy and currency of the databases does not directly impact care, accurate databases are a vital part of data-driven quality improvement activities. It is also likely that some of the increase in valid contacts may be because this year's study did not include calls during normal working hours, when last year's study found the greatest number of access problems. However, valid calls outside of office hours also increased from a year ago, as did the percent of answering machines that provided needed emergency contact information. Next year's study should provide further information concerning the extent to which the improvements observed this year have been sustained and, hopefully, continued.

Another major finding in this year's study is that there were negligible differences in the phone access available to participants in the MEDALLION program and in each of the specific Medallion II health plans. While samples from each plan (80) were small enough so that some differences may not have been detectable (Cohen, 1988), each plan's rates of emergency phone access information was higher than the rates reported for both MEDALLION and Medallion II one year ago. Thus, it appears that all plans are progressing with respect to the phone access to care available to their participants.

Last year's reports identified the value of exploring demand for after-hours medical care and its relationship to quality of care and customer satisfaction. It is important to answer questions such as:

- Who needs to access medical care outside of business hours?
- How frequently do they use it?
- Are patients satisfied with service?
- Do patients know about services available to them?
- Is there equity in access (e.g., what about families without telephones)?
- Is triage performed by medical personnel via telephone effective?

Answering such questions can help the Commonwealth better understand potential cost savings and quality of care improvements that might be effected by further attention to the use of telephone access (e.g., Kempe et al., 2003; Leibowitz, Day, and Dunt, 2003; Lee Guzy, Johnson, Woo, and Baraff, 2002; Gallagher, Huddart, and Henderson, 1998; Kempe, Dempsey et al., 2000; and O'Connell, Stanley, and Malakar, 2001).

Evaluating the demand for, quality of, and satisfaction with health care when 24-hour, 7-day access is provided could help policy makers develop responsive care systems that optimize resource use.

Conclusions and Recommendations

The results of this study suggest that a substantial majority of providers meet the MEDALLION and Medallion II program accessibility requirements and that this percentage has increased substantially. Specifically stated requirements deal with how calls by enrollees should be handled and what information should be given. Table 9 summarizes key quality issues identified with this study along with recommendations for improvement. Because results from MEDALLION and the specific Medallion II plans were not distinguishable, recommendations for all plans are combined.

Table 9. Quality issues and suggestions for improvement in the Virginia Medicaid MEDALLION and Medallion II 24-hour, 7-day per week accessibility to care.

Provider Requirement	Quality Issue	Recommendation
Providers are required to have information about services available 24 hour, 7 days per week via telephone.	• Over 10% of calls made to the sampled telephone numbers in the MEDALLION and Medallion II programs did not reach a medical care or medical information service provider. • When callers were able to reach medical care or medical information service providers, frequently answering services handle the calls.	• Updating provider databases should remain a priority. • Providers without valid numbers should be contacted to determine the reason the number is invalid. Systematically recording this information will clarify whether the inaccuracies are linked to the databases or whether they represent true access barriers to their patients. • Answering services should receive special training on appropriate response procedures, including referral to triage. An alternative would be to develop a system-wide call center to provide this service using medically trained personnel.
When an enrollee contacts an answering machine an on-call medical professional should be automatically paged to make referrals for non-emergency services or to give information about accessing services or handling medical problems during non-office hours.	• 90% of the answering machines gave emergency contact info. • 70% of answering machines provided office hours and 67% gave information needed to page a provider who could give further information.	• A more detailed review of answering machines that fail to meet program requirements should be performed to better understand why this occurs and how it can be corrected. • Either all answering machines should page medical personnel or complete non-emergency contact information should be provided.

Barriers to 24-hour, 7-day-access may decrease the utilization of physician office services, which in turn may increase use of more expensive medical services and harm the quality of care (Leibowitz et al., 2003; Hildebrandt, Westfall, and Smith, 2003). Potential barriers to 24-7 access to care identified in last year's study have shown substantial improvement this year. Reduced barriers include: 1) out of date provider contact

information remains a concern, but has declined substantially; 2) answering services continue to respond to after-hours calls, but such services may provide more reassurance than an answering machine; and 3) some answering machines still provide incomplete information, but this percentage is dropping.

To continue the improvements observed this year, several steps can be taken. These include:

1) Providers with invalid numbers should be contacted. Such contacts may lead to corrected contact information that will directly benefit quality of care. This will also lead to a better understanding of whether incorrect information is caused by, a) databases not reflecting information corrected in sources available to the patient; b) providers who no longer participate in the program; or c) other unknown causes. Beyond directly improving care, information obtained through contacting providers will allow DMAS to most efficiently use quality monitoring and improvement resources.
2) Next year's study should consider drawing physician contact information directly from the sources available to the patients. Plans have printed booklets that provide physician contact information, websites that provide these phone numbers, or both. If next year's study obtains the phone numbers using the same methods available to plan participants, results will more closely reflect the experiences of the participants.
3) Aggregate results of this study should be provided to MEDALLION and Medallion II providers and representatives from each program. Because issues dealing with answering machines are quite easy to fix, publicizing what a "good" answering machine message should include may produce improvements in patient access to care quickly and efficiently.
4) Analyses of emergency room utilization data may allow DMAS to focus on providers whose after-hours phone access is critically important. Emergency room visits represent a substantial cost to the Medicaid program. While some are clearly necessary, better phone triage and after-hours access to physicians is associated with reduced emergency room visits (Chan, Vilke, Smith, Sparrow, and Dunford, 2003; Hildebrandt et al., 2003). Identifying providers with extremely high or low rates of patients' ER visits that do not lead to an admission can be used to perform a detailed examination of the availability and quality of their after-hours phone access.
5) More information on the number and size of answering services used by physicians is important to obtain. Evidence indicates that call centers can be successfully implemented and can improve patients' quality of care Kempe, Luberti at al (2000) and Rose (1999). However, recent research has shown that advice provided by physicians produces high patient satisfaction and compliance than advice from a nurse consultant (Lee et al, 2002). Kempe (2003) has also shown that nurse triage followed by referral to a physician produced lower urgent care visits than other models. The American Academy of Pediatrics (November, 1998) has noted that standardized quality assurance guidelines for medical call centers are lacking. This report offers preliminary suggestions for issues to be considered in the development of such guidelines. Without understanding the number and size of such centers operating in the Commonwealth, it will be difficult to build consensus around standards that can improve patient care quality and reduce expense.

Beyond demonstrating that a large majority of providers in the MEDALLION and Medallion II programs are meeting 24-7 access requirements, this study points to important opportunities to improve patients' access to care whenever it is needed. And while the focus of this study has not been on patient's experiences in the physician's office, it is important to recognize the relationship between that care and 24-7 phone access. Short wait times for appointments and high quality patient care in the office may reduce the need for emergency care or advice after hours. Conversely, effective 24-7 care may enable providers to better manage patient flow and improve the quality of care patients receive in their offices. While improvements need to continue, this year's study shows promising improvement regarding 24-7 access in the MEDALLION and Medallion II programs.

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